

systematic differences, and conformity to malaria treatment policy, in terms of the use of ACT, accuracy of diagnosis, concomitant medication and cost of medication. **RESULTS:** 2,171 patients' records were analyzed. 986 (46%) were sent for laboratory confirmation using microscopy, out of which only 45% tested positive. Majority of prescriptions, 54% was on the basis of presumptive treatment. 58% of slide negative results received antimalarials. Gender disparity was significant; 1207 (56%) females, 942 (43%) males. 93% of prescriptions contained ACTs with AL as the most frequently prescribed antimalarial drug. Monotherapy accounted for 7% of the prescriptions. 97% (1722) of prescriptions received at least one co-medication, mostly analgesics, vitamin preparations and antibiotics. Antibiotics were given to 50% of patients, with children under five most likely to be co-prescribed antibiotics. Overall, median cost of medication was US\$7.34 (US\$0.16 – 262.78) per case. There were significant variations in treatment practices between the two facilities. **CONCLUSIONS:** Evidence suggest high rate of compliance to policy on the use of ACT as first line treatment for uncomplicated malaria but there is significant scope for improved diagnosis and prescription to enhance accuracy of treatment and reduced wastages, especially at the medical center. Regular updates of providers on appropriate practices are needed to improve adherence to treatment guidelines for enhanced efficiency of malaria treatment in Nigeria.

PIN108

EARLY SWITCH/EARLY DISCHARGE OPPORTUNITIES FOR HOSPITALIZED PATIENTS WITH METHICILLIN-RESISTANT STAPHYLOCOCCUS AUREUS COMPLICATED SKIN AND SOFT TISSUE INFECTIONS: PROOF OF CONCEPT IN THE UNITED ARAB EMIRATES

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OBJECTIVES: To describe real-world treatment patterns, health care resource use, and opportunities for early switch (ES) from intravenous (IV) to oral antibiotics and early discharge (ED) for patients hospitalized in the United Arab Emirates (UAE) with methicillin-resistant *Staphylococcus aureus* (MRSA) complicated skin and soft-tissue infections (cSSTIs). **METHODS:** This retrospective observational medical chart review study enrolled physicians from four UAE sites to collect data for 24 total patients with documented MRSA cSSTI, hospitalized between July 2010–June 2011, and discharged alive by July 2011. Data include clinical characteristics and outcomes, hospital length of stay (LOS), MRSA-targeted IV and oral antibiotic use and ES and ED eligibility using literature-based and expert-validated criteria. **RESULTS:** For all patients, the actual length of MRSA-active treatment was 10.8±7 days, with 9.8±6.6 days of IV therapy, and mean LOS 13.9±9.3 days. The most frequent initial MRSA-active therapies used were vancomycin (33.3%), linezolid (16.7%), and clindamycin (16.7%). Five patients (20.8%) were switched from IV to oral antibiotics while inpatient. Eight patients were discharged with MRSA-active antibiotics, with linezolid prescribed most frequently (n=3; 37.5%). Fifteen patients (62.5%) met ES criteria and potentially could have discontinued IV therapy 8.3±6.0 days sooner. Eight patients (33.3%) met ED criteria and potentially could have been discharged 10.9±5.8 days earlier. Assuming an average cost of 2,691 dirhams (\$575)/bed day in the UAE, the total savings would be 29,332 dirhams (\$6,268) in bed-day cost savings realized per ED-eligible patient. **CONCLUSIONS:** While one fifth of patients were switched from IV to oral antibiotics in the UAE, there were clear opportunities for further optimization of health care resources. Over half of UAE patients hospitalized for MRSA cSSTI could be eligible for ES and one-third eligible for ED opportunities, resulting in the potential for a substantial reduction in IV days and bed days.

PIN109

COST-EFFECTIVENESS ANALYSIS OF PROTEASE INHIBITOR MONOTHERAPY VERSUS ONGOING TRIPLE-THERAPY IN THE LONG-TERM MANAGEMENT OF HIV PATIENTS

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OBJECTIVES: To estimate the cost-effectiveness of a strategy of switching the antiretroviral therapy (ART) to protease inhibitor monotherapy (PIM) with prompt return to combination therapy in the event of viral load rebound compared to continuing the ongoing triple therapy (OTT) in the long-term management of HIV-1 infected patients. **METHODS:** Within trial cost-effectiveness analysis and modelling of life-time cost-effectiveness based on a randomised controlled trial of Protease Inhibitor monotherapy Versus Ongoing Triple-therapy (PIVOT). The setting was HIV outpatient care in the UK National Health Service and the trial involved 587 patients, aged 18 years or more, who achieved sustained virological suppression and have a CD4+ cell count >100 cells/mm³. Outcomes were NHS costs (2012 UK Pounds Sterling) and quality-adjusted life-years (QALY) with comparative results presented as incremental cost-effectiveness ratios (ICERs). **RESULTS:** Overall, PIM was cost-effective compared to OTT. PIM was cost-saving due to large savings in the ART drug costs while being no less effective in terms of QALYs in the within trial analysis and only marginally less effective with modelling. In the base-case within-trial analysis, the incremental total cost per patient was -£6,424.11 (95% confidence interval: -£7,418.84 to -£5,429.38) and the incremental QALY was 0.0051 (95% confidence interval: -0.0479 to 0.0582) making PIM dominant compared to OTT. Multiple sensitivity analyses were conducted to assess the importance of assumptions surrounding drug costs, missing data, trial protocol driven costs and mortality. In all sensitivity analyses, PIM was cost-saving and no marked difference in QALY was observed. Modelling of life time costs and QALYs showed significant cost-savings and marginally less effectiveness such that switching to PIM appeared cost-effective at accepted cost-effectiveness thresholds. **CONCLUSIONS:** The results

suggest that PIM is a cost-effective treatment strategy compared to OTT for HIV-1 infected patients who have achieved sustained virological suppression.

PIN111

COST OF ADVERSE DRUG REACTIONS (ADR) WITH PROTEASE INHIBITORS IN THE TREATMENT OF HEPATITIS C IN THE HEALTH SYSTEM OF EXTREMADURA (SES)

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OBJECTIVES: Evaluate the cost associated with the ADRs from the use of boceprevir (BOC) or telaprevir (TLP) in patients treated with protease inhibitors (PI) in the SES. **METHODS:** A multicenter observational study of cohort ITT, extracting the necessary data from the information systems of SES, from September 2012 to December 2013, for patients treated with TLP or BOC was performed. Those co-infected patients (HIV or HBV), in liver transplant or with history of hepatocellular carcinoma were excluded. ADRs assessed were alopecia, fever, retinitis, itching, weight loss, rash, thrombosis, neutropenia, hemorrhoids, stomach pain, amenorrhoea, arthralgia, anxiety and the number of infiltrated blood received by patients. To assess the pharmaceutical cost of ADRs the retail price + VAT at Official List were taken, and to other public health costs SSPE prices, the NHS and records of unit costs were taken also. **RESULTS:** Withdrawals caused by ADRs were higher for TLP (12.2% vs 8.1%, p = 0.09), frequency of pruriginous erythema (44.9% vs 4%, p < 0.001) and anemia (69.4% vs. 52%, p = 0.142). For BOC, there were higher percentages of dysgeusia (16% vs. 0%, p = 0.011), and neutropenia (52% vs. 24.5%, p = 0.018). The results showed a significant difference between the treatment cost per patient associated with ADRs caused by BOC (€ 5,896) compared to the TLP (€ 11,234), for 34.7 weeks (BOC) and 25.9 weeks (TLP). **CONCLUSIONS:** In view of the results obtained, it shows that means a lower costs for the health system in the treatment of ADRs due to the use of PI in patients with hepatitis C patients receiving BOC versus TLP. Postmarketing observational studies are needed to determine the actual efficacy and safety of new drugs.

PIN112

PRIMARY CARE PHYSICIANS IN AN INTERFERON-FREE WORLD: COULD SAFER, MORE EFFECTIVE ORAL HEPATITIS C THERAPIES LEAD TO IMPROVED OUTCOMES THROUGH EDUCATION AND PCP-PRESCRIBED TREATMENT?

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OBJECTIVES: Hepatitis C virus (HCV) treatments have been improved by the availability of highly effective and well-tolerated interferon-free therapies. This study probes the impact of such therapies on the role of primary care physicians (PCPs) in diagnosis, referral, and treatment of HCV patients who have historically been treated by gastroenterologists and hepatologists. **METHODS:** In the U.S., 100 PCPs, 51 specialists (44 gastroenterologists, 7 hepatologists), and 30 Managed Care Organization (MCO) pharmacy directors/medical directors (PDs/MDs) were surveyed to assess PCP knowledge of and involvement in HCV diagnosis and screening, referral patterns, and treatment options. **RESULTS:** Survey results identify referral to specialists as a notable barrier to accessing care. Some 77% of PCPs who follow-up with patients they refer to HCV specialists estimate that 24% are lost to follow-up. Similarly, 73% of specialists report having PCP-referred patients who missed their exam, and these specialists estimate that 15% of all PCP-referred patients "drop off". In anticipation of multiple new HCV therapies reaching the major markets, several professional societies have collaborated to develop expert-curated, regularly updated guidelines providing clinical recommendations for diagnosing and treating HCV patients (www.hcvguidelines.org). Among surveyed PCPs, 74% were unaware of these guidelines; however, once informed, 63% of all PCP respondents indicated greater comfort with prescribing treatments recommended by these guidelines. Furthermore, 63% of MCO PDs/MDs and 98% of HCV specialists surveyed reported feeling more comfortable with PCPs prescribing these recommended treatments. **CONCLUSIONS:** The substantial decline in the cascade of care from PCP referrals to specialists suggests that educating PCPs on new interferon-therapies presents an opportunity to maximize retention in care and accelerate efforts to identify undiagnosed cases. Survey responses from PCPs, as well as specialists, and MCO PDs/MDs suggest that practical, regularly updated clinical guidelines prepared by international experts could provide a common framework for educational outreach efforts to PCPs.

PIN113

COVERAGE OR EFFICACY: WHICH FACTOR IS THE MOST INFLUENTIAL FOR REDUCING VARICELLA WITH ROUTINE CHILDHOOD VACCINATION IN ITALY?

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OBJECTIVES: Policymakers may have a concern that a long time interval between two doses, partial efficacy and potential waning after the first dose of varicella vaccination would reduce the impact of a universal childhood varicella immunization program. The objective of this study is to determine the potential impact and relative weight of 2 key factors: (1) coverage and (2) vaccine efficacy (VE) of the first dose of varicella vaccination (VE-D1) in the context of long term interval between two doses on varicella epidemiology in Italy. **METHODS:** An age-structured dynamic transmission model is adapted and fitted to the seroprevalence of varicella in Italy in absence of vaccination. Vaccination is introduced with 1- and 2-dose VE, with long time interval between 2 doses (given at 13 months and 6 years of age). Several scenarios are tested including 2 levels of VE-D1 (65%/75%) and 3 coverage levels (95%/80%, 85%/70%, 75%/60%, respectively). Efficacy post-dose 2 is fixed at 95%. **RESULTS:** For a vaccine coverage of 95%/80%, the reduction in number of varicella cases compared with the absence of vaccination for 75% and 65% VE-D1 was respectively 89.2%/87.5% by year 30, and 78.9%/74.6% by year 80 after vaccination program initiation. For a vaccine coverage of 85%/70%, the reduction in number of